

CHEMICAL HAZARDS PROGRAM Environmental Health Branch

Georgia Department of Community Health Atlanta, GA



Technical Assistance

Peach County

Peach County Private Wells July 15, 2010

On January 22, 2009, a resident's well water was sampled for metals, pesticides and volatile organics by Black and Veach, a contractor for the U.S. Environmental Protection Agency. All parameters measured met federal drinking water standards except lead, which has a limit of 15 ppm in drinking water. The lead level in the individual's well water was measured at 74.9 ppm. Their well is identified as PW109 in the Letter Health Consultation. Children who consume water from the well could be harmed.

Lead is a naturally occurring bluish white metal found in small amounts of the earth's crust. Individuals are exposed to lead by eating food or drinking water that contains lead or by other human activities such as burning fossil fuels, mining or manufacturing in which the toxic metal is inhaled. The main target for lead toxicity in both adults and children is the nervous system. Longterm lead exposure in adults can result in increased blood pressure, and repeated exposure to high lead levels can severely damage the brain and kidneys. Children are more vulnerable to lead poisoning and. when exposed to lead under the age of six, can suffer irreversible mental and physical damage. Small children are exposed to lead by eating lead based paint chips, chewing on objects covered with lead-based paint, through contaminated drinking water, and by swallowing house dust or soil that contains lead. A child who consumes large amounts of lead may develop anemia, severe stomach aches, muscle weakness, and brain damage.

If the individual is concerned with exposure to lead, there are options available to her to avoid exposure. One option is to use bottled water for consumption instead of her well water. Another option would be installing a reverse osmosis filtration system to remove the lead from her well water.

The Georgia Department of Public Health recommends routine water sampling of individual water supply systems on an annual basis. The Peach County Health Department, Environmental Health Section can test a home's water for bacteria and the local Cooperative Extension Office can evaluate a home's well water for other parameters, including lead, by request.

If you are concerned about lead exposure, the Georgia Department of Public Health recommends that you consult with a health care professional for medical testing to determine if elevated lead levels exist in your blood. Parents may get their child's (six years of age and under) blood lead level tested by a health care professional or by contacting the Peach County Health Department.